

**IN THE UNITED STATES DESIGNATED/ELECTED OFFICE**

International Application No. : PCT/EP2004/014916  
International Filing Date : November 17, 2004  
Priority Date(s) Claimed : November 17, 2003  
Applicant(s) (DO/EO/US) : Claude LARDY et al.

Title: DIPHENYLAMINE DERIVATIVES

**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

**Timing and Fees**

- ☒ Under 37 C.F.R. § 1.97(b), no fee or statement is required for filing this information disclosure statement is filed:
- ☐ within three months of the filing date of a national application other than a CPA under § 1.53(d);
  - ☒ within three months of the actual filing date of the national phase of a PCT application; OR
  - ☐ before the mailing of a first substantive office action (including after filing of an RCE).
- ☐ Under 37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods specified in 37 C.F.R. § 1.97(b), but before the mailing date of:
- a final rejection under 37 C.F.R. 1.113;
  - termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); OR
  - a notice of allowance under 37 C.F.R. § 1.311; and

is accompanied by:

- ☐ the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR
- ☐ a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p).

☐ Under 37 C.F.R. § 1.97(d), this information disclosure statement is filed after the mailing date of the following actions which have not been withdrawn:

- ☐ a final action under 37 C.F.R. § 1.113;
- ☐ termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2);
- ☐ OR a notice of allowance under 37 C.F.R. § 1.311;

AND is filed on or before payment of the issue fee; AND is accompanied by:

the statement as specified in 37 C.F.R. § 1.97(e) as set forth below, and the fee of \$180.00 under 37 C.F.R. § 1.17(p).

Statements Under 37 C.F.R. 1.97(e)

- ☐ Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned attorney after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing date of the information disclosure statement.

Cited Materials

- ☐ Copies of materials listed but not attached were cited in benefit (35 U.S.C. § 120) ancestor application Serial No. \_\_\_\_\_, on Form 892 by the Examiner and/or Form 1449 by the applicant; see 37 C.F.R. § 1.98(d).
- ☒ Copies of materials listed but not attached were cited in an international search report dated June 22, 2005.
- ☐ Not required by 37 CFR § 1.98.
- ☐ Copies of the materials listed are attached (except for the foregoing).

### Non-English Language References

☒ An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).

☐ A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:

X = document of particular relevance when it is taken alone  
Y = document of particular relevance when it is combined with another such document  
A = document defining the general state of the art  
O = non-written disclosure  
P = intercalated document  
T = document cited to understand the theory or principle underlying the invention  
E = patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date  
D = cited in the application  
L = cited for another reason  
& = publication of member of same patent family

☐ Translation of other relevant information on foreign search report

[insert necessary translation here]

### Other Information

#### Payment of Fees Due (If Any):

☐ A check for \$\_\_\_\_\_ covering the fee identified above is attached.


☐ Please charge to Deposit Account No. 13-3402 \$\_\_\_\_\_ for the fee identified above.

88/580603

AP20 Rec'd PCT/PTO 25 MAY 2006

☒ The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,

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for 117  
\_\_\_\_\_  
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Attorney Docket No.: MERCK-3173

Date: May 25, 2006

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>		
Sheet		1	of	2	Application Number Filing Date First Named Inventor Group Art Unit Examiner Name Attorney Docket Number	Unassigned May 25, 2006 Claude LARDY et al. Unassigned Unassigned MERCK-3173

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
	1	4316044		ISHIMITSU KEIICHI ET AL.	February 16, 1982
	2	5196610		CARR ROBIN A E et al.	March 23, 1993

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	3	JP	57175106		Yoshio Katsuta	October 28, 1982		
	4	GB	1307284		Boots Pure Drug Co Ltd.	February 14, 1973		
	5	JP	04220442		Sumitomo Chem Co Ltd.	August 11, 1992		
	6	WO	03087045		Little Paul Brian	October 23, 2003		
	7	WO	03076406		Merck Patent GMBH	September 18, 2003		

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. Number refers to English language corresponding family member.

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
		Application Number	Unassigned 1560603		
		Filing Date	May 25, 2006 1560603		
		First Named Inventor	Claude LARDY et al.		
		Group Art Unit	Unassigned		
		Examiner Name	Unassigned		
		Attorney Docket Number	MERCK-3173		
Sheet	2	of	2		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	8	DATABASE CHEMABS 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; KIZBER, A.I. ET AL: "Transformations in the series of diazoamino compounds. I. Thermal decomposition of carboxy-substituted diazoaminobenzenes" XP00229698 & ZHURNAL OBSHCHEI KHIMII, 27, 2208-13 CODES: ZOKHA4; ISSN: 0044-460X, 1957	
	9	KNOCHEL PAUL: "A New General Preparation of Polyfunctional Diarylamines by the Addition of Functionalized Arylmagnesium Compounds to Nitroarenes" J. AM. CHEM.SOC., no. 124, 2002, pages 9390-9391, XP002296494.	
	10	PATENT ABSTRACTS OF JAPAN vol. 0070, no 19 (C-147), 25 January 1983	
	11	PATENT ABSTRACTS OF JAPAN vol. 0165, no. 66 (C-1009), December 8, 1992.	
	12	PETER J. O'BRIEN: "A comparison of hepatocyte cytotoxic mechanisms of Cu <sup>2+</sup> and Cd <sup>2+</sup> " Toxycology, no. 143, 2000, pages 263-273, XP002296495.	
	13	GONUL SAHIN: "Effects of some probable antioxidants on the selenite-induced cataract formation and oxidative stress-related parameters in rats" TOXYCOLOGY, no. 139, 1999, pages 219-232, XP002296496	
	14	Jeffery W. Kelly: "Synthesis, Structure and Activity of Diclofenac Analogues as Transthyretin Amyloid Fibril Formation Inhibitors" J.MED.CHEM., no. 45, 2002, pages 321-332, XP002296497.	
	15	DATABASE BEILSTEIN Beilstein Institute for organic chemistry, Frankfurt-Main, DE; XP002328213 & Gorvin, John H.: J.CHEM.SOC.PERKIN Trans.1, 1988, pages 1331-1336	
	16	DATABASE BEILSTEIN Beilstein Institute For organic Chemistry, Frankfurt-Main, DE; XP002328214 & LANTZ: BULL.SOC.CHIM.FR., 1956, pages 311-315	
	17	DATABASE CA CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; WARD YANCEY D.: "Solid phase synthesis of aryl amines via palladium catalysed amination of resin-bound aromatic bromides" XP002328215 & TETRAHEDRON LETTERS, vol. 37, no. 39, 1996, pages 6993-6996.	
	18	DATABASE CA CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; BURGER ALFRED: "Some derivatives of 4-hydroxydiphenylamine-4-carboxylic acid" XP002328216 & J.A.C.S., no. 77, 1955, pages 5733,	
	19	MAFFEI FACINO R ET AL: "Antioxidant Profile of Nimesulide, Indomethacin and diclofenac in phosphatidylcholine liposomes (pcl) as membrane model" international journal of tissue reactions, bioscience ediprint, geneva, CH, vol. 15, no. 6, 1993, pages 225-234, XP002048767	

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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